

software. A communications, registration, and user interface software component, also residing on the user's computer, obtains the contact data from the interface component, and passes it over the Internet to a registration server system which holds this data in a contact info database to be used by the TSPS when providing call screening information for each user.

[0076] Under an alternative embodiment, this additional information may be in the form of an extra character inserted at the end of an appropriate field, for example the business phone number field for the contact. For example, if a "+" is inserted at the end of the phone number, then if a call is received for the user by the TSPS, then the TSPS will automatically route the call directly to the user's current phone number. However if a "-" is inserted at the end of the phone number field, then the call might be routed to voice mail. If there is no extra character inserted in the field, then the call might be handled according to a default call handling method, for example the caller might be prompted to "...touch 0 if the call is important", and if the caller touches 0 then the call will be routed to the users current phone number, and otherwise the call will be routed to voice mail.

[0077] In another embodiment, the additional information may be in the form of a numeric code inserted into an otherwise unused field in the contact database, such as in a "Other Phone Number" field. The numeric code would provide an indication of the appropriate call handling method for calls received from this caller. For example a "1" in this field might indicate to route all calls immediately to the users phone number, a "2" might indicate to route calls to voice mail, a "3" might indicate to route calls to the users secretary, a "4" might indicate that the TSPS should give the caller various menu choices before routing the call, a "5" might indicate to route calls to the user's cell phone, a "6" might indicate to route calls to the user's pager, a "7" might indicate to route calls to a particular predefined extension in a PBX system, and the like. Under a default option where no number is present in this field, the call is handled under a predetermined default method, such as being routed to a receptionist. In general, the system may employ any method of call routing, including those described in detail in U.S.

Patent Nos. 5,752,191, 5,694,453, 5,610,970, 5,588,037, 5,375,161, and 5,841,837.

[0078] In yet another embodiment, the additional information may be in the form of a phone number inserted into an available field in the contact database. This phone number would indicate the phone number to route the call, should a call be received from this contact.

[0079] In general, user input described herein may be of any form, not necessarily point and click or keyboard interaction with a web page using a computer input device, personal computer and web browser software. For example, user input may be of a graphical form (e.g., bitmapped, vector-based or matrix), or where such user input is provided to the user via an appropriate device, such as a palm top computer having a wireless connection to the system. Of course, dual-tone, multi-frequency (DTMF) or voice command using interactive voice response (IVR) input may be employed. Thus, user input by the user computer may be in any format, such as alphanumeric characters in ASCII or Unicode format, voice commands, graphical input, etc. Graphical input, for example, may represent shapes, or single stroke character input, e.g., drawn by a user on a palm top computer, where such bitmap or vector images are then transmitted to the server as user input.

[0080] Unless the context clearly requires otherwise, throughout the description and the claims, the words "comprise," "comprising," and the like are to be construed in an inclusive sense as opposed to an exclusive or exhaustive sense; that is to say, in a sense of "including, but not limited to." Words using the singular or plural number also include the plural or singular number respectively. Additionally, the words "herein," "above", "below" and words of similar import, when used in this application, shall refer to this application as a whole and not to any particular portions of this application.

[0081] The above detailed descriptions of embodiments of the invention are not intended to be exhaustive or to limit the invention to the precise form disclosed above. While specific embodiments of, and examples for, the invention are

described above for illustrative purposes, various equivalent modifications are possible within the scope of the invention, as those skilled in the relevant art will recognize. For example, while steps are presented in a given order, alternative embodiments may perform routines having steps in a different order. The teachings of the invention provided herein can be applied to other systems, not necessarily the call routing system described herein. These and other changes can be made to the invention in light of the detailed description.

[0082] The elements and acts of the various embodiments described above can be combined to provide further embodiments. All of the above references and U.S. patents and applications are incorporated herein by reference. Aspects of the invention can be modified, if necessary, to employ the systems, functions and concepts of the various patents and applications described above to provide yet further embodiments of the invention.

[0083] These and other changes can be made to the invention in light of the above detailed description. In general, the terms used in the following claims, should not be construed to limit the invention to the specific embodiments disclosed in the specification, unless the above detailed description explicitly defines such terms. Accordingly, the actual scope of the invention encompasses the disclosed embodiments and all equivalent ways of practicing or implementing the invention under the claims.

[0084] While certain aspects of the invention are presented below in certain claim forms, the inventors contemplate the various aspects of the invention in any number of claim forms. For example, while only one aspect of the invention is recited as embodied in a computer-readable medium, other aspects may likewise be embodied in a computer-readable medium. Accordingly, the inventors reserve the right to add additional claims after filing the application to pursue such additional claim forms for other aspects of the invention.